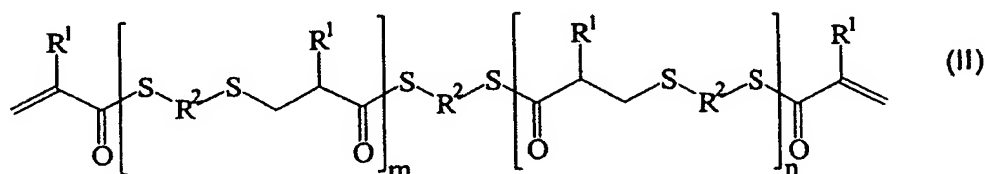


# IN THE CLAIMS

Please amend the claims as follows:

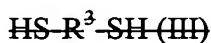
Claim 1 (Currently Amended): ~~Mixture~~ A mixture for preparing transparent plastics, ~~encompassing comprised of~~

a) a prepolymer prepared from compounds of the formula (I) and (II)



where each  $\text{R}^1$ , ~~independently of the others~~, is hydrogen or a methyl radical,  
each  $\text{R}^2$ , ~~independently of the others~~, is a linear or branched, aliphatic or cycloaliphatic radical, or a substituted or unsubstituted aromatic or heteroaromatic radical,  
and each of m and n, ~~independently of the others~~, is a whole number greater than or equal to 0, where  $m + n > 0$ , and

from alkyl dithiols or from polythiols, ~~preferably compounds of the formula (III)~~,



~~where  $\text{R}^3$ , identical with or different from  $\text{R}^2$ , can be as defined for  $\text{R}^2$ , and~~

b) at least one monomer (A) capable of free-radical polymerization and having at least  
[[2]] two methacrylate groups, and  
c) aromatic vinyl compounds,

d) ~~if appropriate,~~ a monomer selected from the group consisting essentially of a monomer capable of free-radical polymerization and having at least two terminal olefinic groups whose reactivity differs, ~~and/or~~

e) ~~if appropriate,~~ at least one ethylenically unsaturated monomer (B) and mixtures thereof.

Claim 2 (Currently Amended): ~~Mixture~~ A mixture according to Claim 1, ~~characterized in that it comprises~~ comprising more than 10 mol%, ~~of compounds of the formula (II) where  $m + n = 2$  based on the total amount of the compounds of the formula (I), (II) and (III), of compounds of the formula (II) where  $m + n = 2$  (I), (II) and compounds from alkyl dithiols or from polythiols.~~

Claim 3 (Currently Amended): ~~Mixture~~ A mixture according to ~~any of the preceding claims~~ Claim 1, ~~characterized in that~~ comprising the radical  $R^2$  of the formulae (I) and/or (II) is an aliphatic radical having from 1 to 10 carbon atoms.

Claim 4 (Currently Amended): ~~Mixture~~ A mixture according to ~~any of the preceding claims~~ Claim 1, ~~characterized in that the mixture comprises~~ comprising more than 5.8 mol% of compounds of the formula (II) where  $m+n=3$ , based on the total amount of the compounds of the formula (I) and (II), and (III), of compounds of the formula (I), (II) and compounds from alkyl dithiols or from polythiols.

Claim 5 (Currently Amended): ~~Mixture~~ A mixture according to ~~any of the preceding claims~~ Claim 1, ~~characterized in that the mixture comprises~~ comprising from 0.1 to 50 mol% of compounds of the formula (I), based on the total amount of the compounds of the formula

(I), (II)<sub>1</sub> and ~~(III)~~ (I), (II) and compounds from alkyl dithiols or from polythiols of compounds of the formula (I).

Claim 6 (Currently Amended): ~~Mixture~~ A mixture according to ~~any of the preceding~~ claims claim 1, ~~characterized in that the mixture comprises~~ comprising from 1 to 40 mol% of compounds of the formula (II) where  $m + n = 1$ , based on the total amount of the compounds of the formula (I), (II)<sub>1</sub> and ~~(III)~~ (I), (II) and compounds form alkyl dithiols or from polythiols, ~~of compounds of the formula (II) where  $m + n = 1$~~ .

Claim 7 (Currently Amended): ~~Mixture~~ A mixture according to ~~any of the preceding~~ claims Claim 1, ~~characterized in that the mixture comprises~~ comprising compounds of the formula (II) where  $m + n > 3$ .

Claim 8 (Currently Amended): ~~Mixture~~ A mixture according to ~~any of the preceding~~ claims Claim 1, ~~characterized in that~~ wherein the total content of compounds of the formula (I), (II)<sub>1</sub> and ~~(III)~~ (I), (II) and compounds form alkyl dithiols or from polythiols is at least 5.0% by weight, based on the total weight of the mixture.

Claim 9 (Currently Amended): ~~Mixture~~ A mixture according to ~~any of the preceding~~ claims Claim 1, ~~characterized in that~~ wherein the mixture comprises at least one monomer (A) which is copolymerizable with the prepolymers prepared from the monomers of the ~~formulae (I), (II) and (III)~~ formulas (I), (II) and compounds from alkyl dithiols or from polythiols.

Claim 10 (Currently Amended): ~~Mixture~~ A mixture according to Claim 9,  
~~characterized in that wherein~~ the mixture ~~encompasses~~ further comprises di(meth)acrylates.

Claim 11 (Currently Amended): ~~Mixture~~ A mixture according to ~~the preceding~~  
~~claims Claim 1, characterized in that wherein~~ the aromatic vinyl compounds ~~present in the~~  
~~mixture preferably~~ comprise styrene.

Claim 12 (Currently Amended): ~~Mixtures~~ A mixture according to Claim 1,  
~~characterized in that it comprises~~ further comprising a monomer capable of free-radical  
polymerization and having at least two terminal olefinic groups whose reactivity differs, of  
the ~~general~~ formula



where

the radical  $R^{19}$  at opposing ends of the molecule represented by the formula (XII) is  
the same or different and is selected from the group consisting essentially of independently a  
hydrogen atom, a fluorine atom, ~~and/or~~ and a methyl group,

the radical  $R^{18}$  is a connecting group which ~~preferably encompasses from~~ has from 1  
to 1000, ~~in particular from 2 to 100,~~ carbon atoms,

the radical Y is a ~~bond or~~ a connecting group having from 0 to 1000 carbon atoms, ~~in~~  
~~particular from 1 to 1000 carbon atoms, and preferably from 1 to 100 carbon atoms.~~

Claim 13 (Currently Amended): ~~Mixtures~~ A mixture according to Claim 12,  
~~characterized in that they comprise~~ further comprising allyl polyethylene glycol methacrylate.

Claim 14 (Currently Amended): ~~Mixtures~~ A mixture according to Claim 1,  
~~characterized in that they comprise~~ further comprising at least one ethylenically unsaturated  
monomer (B), ~~preferably methacrylate~~.

Claim 15 (Currently Amended): ~~Mixtures~~ A mixture according to Claim 14, wherein  
(B) ~~characterized in that they comprise~~ comprises 2-hydroxyethyl methacrylate.

Claim 16 (Currently Amended): ~~Process~~ A process for preparing a transparent  
plastics, ~~characterized in that a mixture according to any of the preceding claims is~~  
polymerized plastic comprising polymerizing the mixture of Claim 1.

Claim 17 (Currently Amended): ~~Transparent~~ A transparent plastic ~~obtainable via a~~  
prepared by the process of ~~according to~~ Claim 16.

Claim 18 (Currently Amended): ~~Plastic~~ A plastic according to Claim 17,  
~~characterized in that~~ wherein the refractive index of the plastic to DIN 53491 is greater than  
1.59.

Claim 19 (Currently Amended): ~~Plastic~~ A plastic according to Claim 17 ~~or 18~~,  
~~characterized in that~~ wherein the Abbe number of the plastic to DIN 53491 is greater than 36.

Claim 20 (Currently Amended): ~~Plastic~~ A plastic according to ~~any of Claims Claim~~  
~~17 to 19, characterized in that wherein~~ [[the]] an average diameter of [[the]] a ball which does  
not damage the test specimen in [[the]] a falling ball test is  $\geq 18$ .

Claim 21 (Currently Amended): ~~Plastic~~ A plastic according to ~~any of Claims Claim~~  
~~17 to 20, characterized in that wherein~~ the transmittance of the plastic to DIN 5036 is  $\geq 89\%$ .

Claim 22 (Currently Amended): ~~Plastic~~ A plastic according to ~~any of Claims Claim~~  
~~17 to 21, characterized in that its wherein the~~ glass transition temperature is greater than  
80.0°C.

Claim 23 (Currently Amended): ~~Use of~~ A method of using the high-transparency  
plastic according to ~~any of Claims Claim~~ 17 to 22 as an optical lens.

Claim 24 (Currently Amended): ~~Optical, An optical in particular ophthalmic,~~ lens  
comprising a transparent plastic according to ~~at least one of Claims Claim~~ 17 to 22.